

Name: _____

at1124exam: Radicals and Squares (v817)

Question 1

Simplify the radical expressions.

$$\sqrt{45}$$

$$\sqrt{20}$$

$$\sqrt{18}$$

Question 2

Find all solutions to the equation below:

$$4(x - 9)^2 - 5 = 95$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 18x = -45$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 2x^2 - 24x + 68$$

Express the function in **vertex form** and identify the **location** of the vertex.